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ON THE GENUS *ACANTHOLYBAS* BREDDIN (INSECTA: HETEROPTERA: COREIDAE: COLPURINI), WITH DESCRIPTION OF ONE NEW SPECIES FROM JAVA

HARRY BRAILOVSKY[1]
Research Associate, Section of Invertebrate Zoology

ABSTRACT

Acantholybas steinbaueri, a brachypterous new species, is described and illustrated from Java (Bali Island and Dammerman). The genus *Acantholybas* is redescribed, and a key to the four known species is provided.

INTRODUCTION

The genus *Acantholybas* was proposed by Breddin (1899) to include the species *A. longulus* collected from Lombok Island and later recorded from Sumbawa (Blöte, 1936). Subsequently Breddin (1900*b*) described the genus *Acanthocolpura* with one species, *A. brunneus,* from New South Wales, Australia, and in the same year (Breddin, 1900*a*) synonymized *Acanthocolpura* with *Acantholybas* and transferred *A. brunneus* to *Acantholybas.* Bergroth (1909) described *A. kirkaldyi* from Tasmania (Semmens et al., 1992).

Acantholybas belongs to the group of Colpurini with the abdominal sternite VII of the female complete, without plica or fissura, and has not been previously reviewed or revised. There are no keys or modern descriptions for any of the species except *A. brunneus* (Woodward, 1951, 1953, 1961; Wise, 1958*a,* 1958*b*; Brailovsky, 1993).

An examination of material representing *Acantholybas* spp. indicates that the critical differences between species are found in the development of the callar region, tylus, hemelytra, proportions of the antennal segments, and relative body size. This paper presents a summary of these comparisons.

The following abbreviations identify the institutions where types are deposited: BPBM, Bernice P. Bishop Museum, Honolulu, Hawaii; UNAM, Colección Entomológica del Instituto de Biología, Universidad Nacional Autónoma de México; ZIL, Zoological Institute, St. Petersburg, Russia.

SYSTEMATIC ENTOMOLOGY

Acantholybas Breddin (Fig. 1–10)

Acantholybas Breddin, 1899:169–170.

Diagnosis.—*Acantholybas* Breddin is distinguished by the globose, apically truncated or bifid tylus, the armed antenniferous tubercle, the armed buccula with an obvious spine near the middle third, the unarmed femora and the abdominal sternite VII of female without plica or fissura. *Pachycolpuroides* Brailovsky

[1] Instituto de Biología, UNAM, Depto. de Zoología, Apdo. Postal 70153, México 04510 D. F. México.
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(1993), the most closely related genus, may be recognized by its smaller size, rounded buccula without teeth or spiny projection, and shorter rostrum not extending beyond the anterior margin of the metasternum.

Redescription.—Head: pentagonal, wider than long (across eyes) and dorsally slightly convex; tylus unarmed, apically globose or bifid, extending anteriorly to the jugae and more raised in lateral view; jugae unarmed, thickened, and shorter than tylus; antenniferous tubercle armed, lobes raised, diverging anteriorly, and apically subacute; side of head in front of eye short, unarmed, and obliquely straight; antennal segment I robust, thickest or more or less slender, slightly curved outward and shorter than head; segments II and III cylindrical and slender; segment IV fusiform; segment II longest; segment I shorter; segment IV longer or shorter than III (Fig. 2–4); ocelli tuberculate, well developed; preocellar pit deep; eyes large, hemispherical, sessile; postocular tubercle protuberant; buccula rounded, short, not projecting beyond antenniferous tubercle, with sharp spiny projection; rostrum reaching posterior third of abdominal sternite IV or anterior third of V; mandibular plate absent.

Thorax: pronotum wider than long, nearly trapeziform, slightly bilobed, and nondeclivent; anterior lobe shorter than posterior lobe, both with lateral margins convexly rounded, not elevated, and slightly reflexed; collar wide; frontal angles produced forward as conical lobes; humeral angles rounded; posterolateral border straight and posterior border slightly concave; callar region transversely convex with or without median longitudinal depression. Anterior lobe of metathoracic peritreme reniform, posterior lobe sharp, small.

Legs: femora unarmed; tibiae sulcate.

Scutellum: longer than wide, wider than long, or equilateral; triangular, with the apex rounded or subacute and raised or not above disc; disc nearly flat.

Hemelytra: macropterous forms with hemelytral membrane well developed, extending to the apex of abdomen or beyond. Brachypterous forms with clavus and corium distinctly separate; hemelytral membrane reduced, reaching the third abdominal segment; wings widely separated from each other, leaving the abdomen exposed mesally.

Abdomen: connexival segments higher than abdominal segments, with posterior angle not produced into spines; abdominal sternites with medial furrow extending to anterior third of sternite V.

Integument: body surface mostly dull, with head, thorax, and abdomen slightly shining. Pronotum, scutellum, clavus, corium, dorsal abdominal segments, ventral surface of head, thorax, abdominal sterna, and genital capsule strongly punctate. Dorsal surface of head with scattered punctures and connexival segments practically smooth. Body with short, decumbent, silvery bristle-like setae, intermixed with long erect setae located on the abdominal sterna, legs, and antennal segments.

Male genitalia: genital capsule: posteroventral border broadly rounded, with a large internal emargination (Fig. 5). Parameres: body robust, with anterior lobe convex, and posterior lobe long (Fig. 6–7, variation for the different view).

Female genitalia: abdominal sternite VII complete, without plica or fissura. Genital plates: gonocoxa I oblique, with a convex and protruding external margin, slightly emarginate; paratergite VIII short, square, with visible spiracle; paratergite IX squarish, larger than paratergite VIII (Fig. 8–9).

Distribution.—*Acantholybas* species have been collected from Lombok Island (Indonesia), Australia, Tasmania, New Zealand, and now recorded from Java.

Type Species.—*Acantholybas longulus* Breddin.

Acantholybas steinbaueri, **new species**
(Fig. 1–2, 5, 8–9)

Description.—Color, male. Head: anterior lobe of the pronotum, scutellum, connexival segments, dorsal abdominal segments, thorax, and abdominal sterna bright to dark red-brown with dark orange reflections; apex of scutellum and anterior and posterior lobe of metathoracic peritreme yellowish white to pale yellow; antennal segments I–III dark orange-brown with reddish brown reflections; segment IV pale yellow with proximal end dark orange-brown; posterior lobe of pronotum, clavus, and corium dark to pale orange-yellow; rostral segments dark orange-brown with basal segment paler; superior area of the postocular tubercle, posterior edge of connexival segments IV–VI, and posterior

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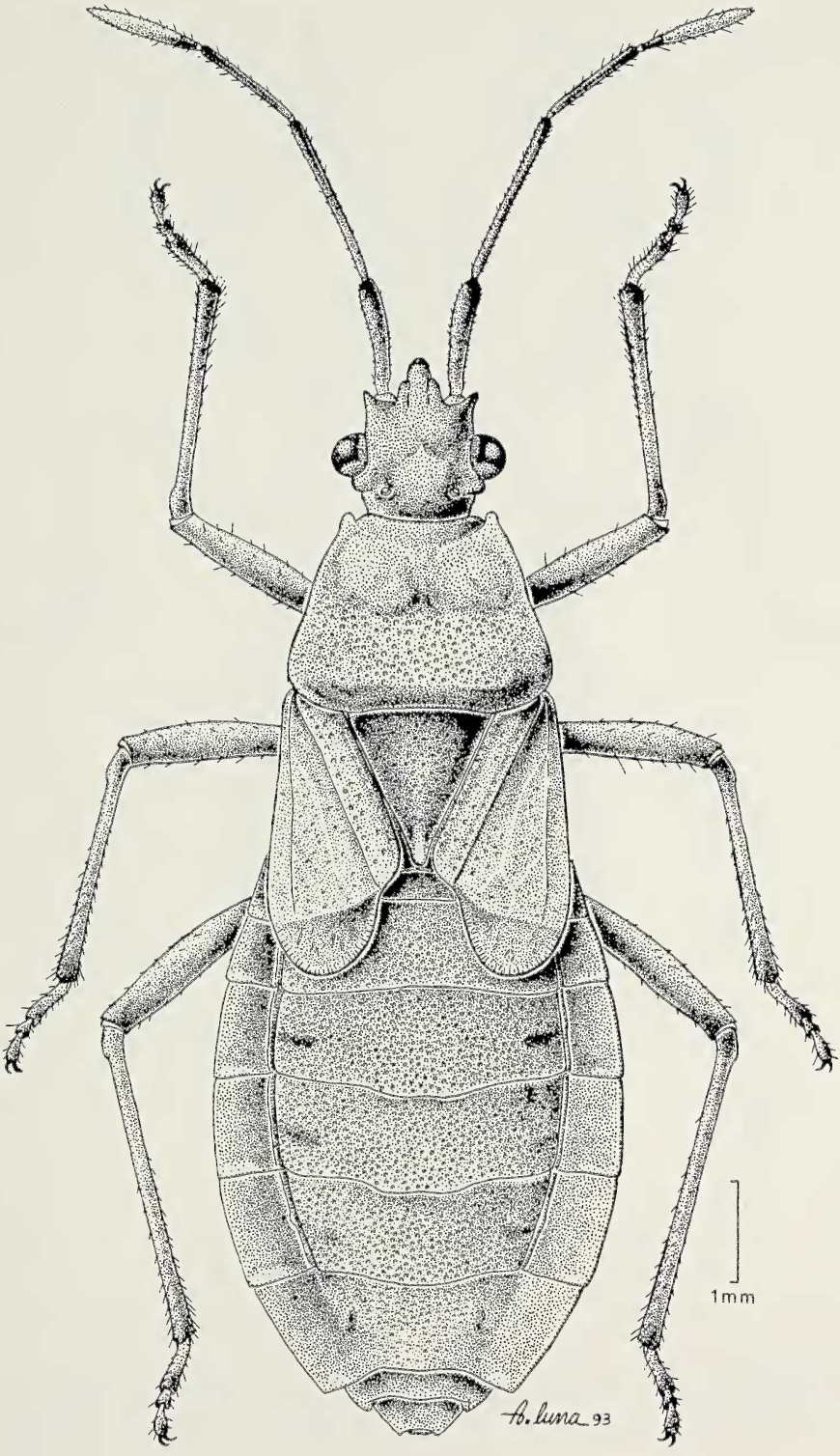
Fig. 1.—*Acantholybas steinbaueri* Brailovsky, new genus, new species; female.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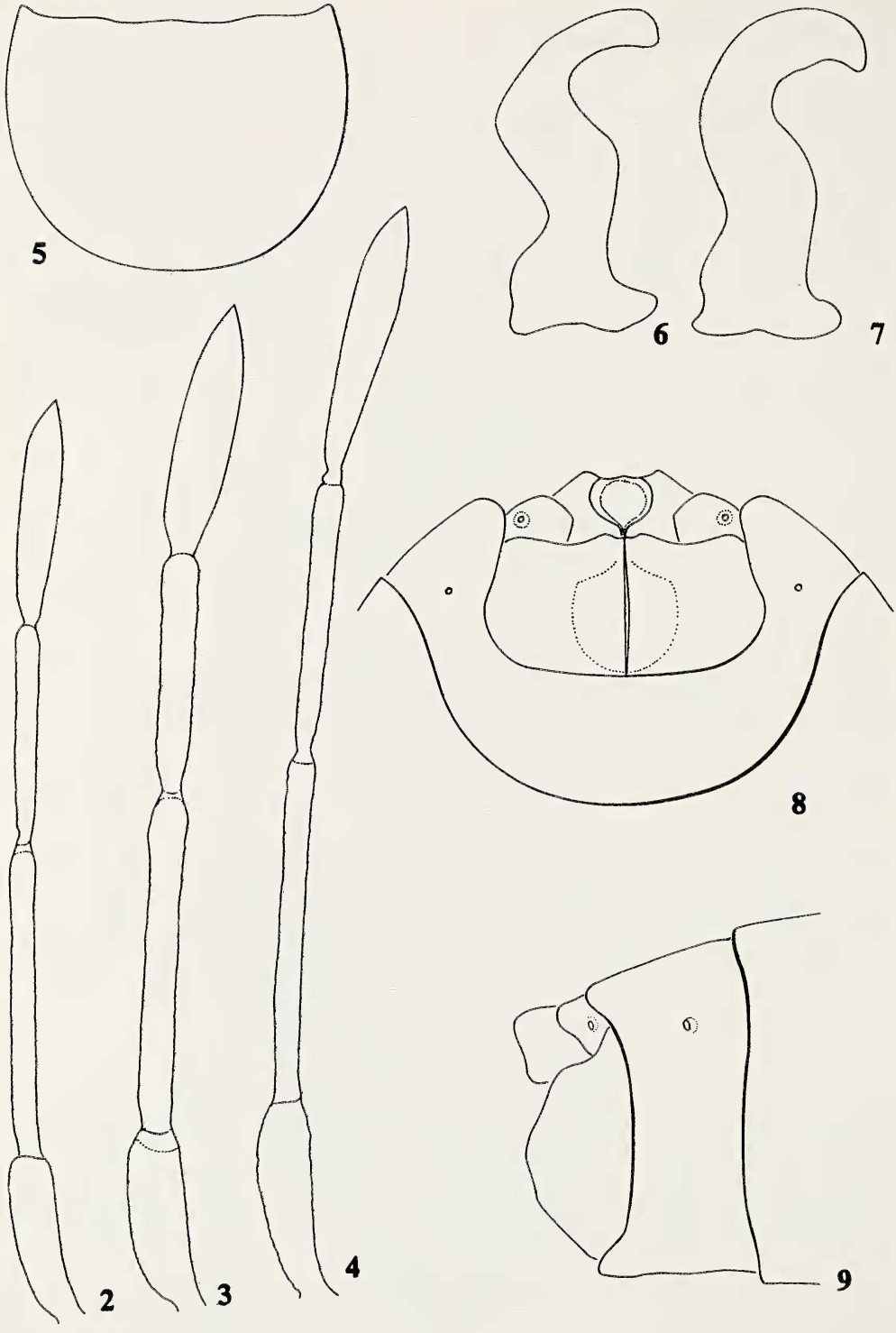
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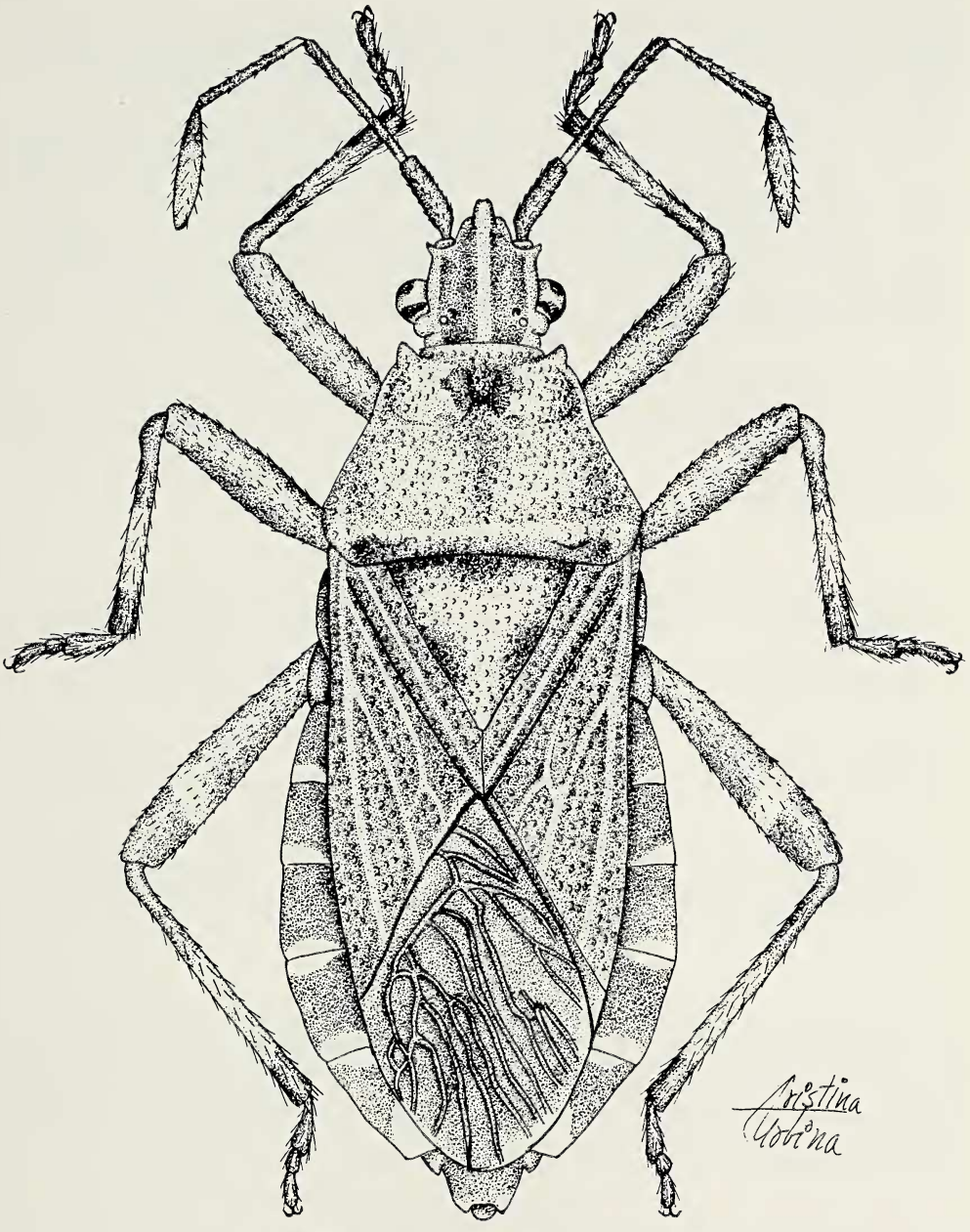

Fig. 10.—*Acantholybas brunneus* (Breddin); female.

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Fig. 2–9.—Antennae and genitalia of *Acantholybas*. 2, antennal segments of *A. steinbaueri* Brailovsky; 3, antennal segments of *A. kirkaldyi* Bergroth; 4, antennal segments of *A. brunneus* (Breddin); 5, male genital capsule of *A. steinbaueri* Brailovsky; 6–7, parameres of *A. brunneus* (Breddin); 8–9, female genital plates of *A. steinbaueri* Brailovsky; 8, caudal view; 9, lateral view.

edge of pleural sterna IV–VI yellow; coxae dark reddish brown with orange reflections; trochanters dark orange-brown with dorsal face pale yellow; anterior and middle femora dark orange-brown; posterior femora dark orange-brown with a wide yellow ring located on the middle third; tibiae dark orange-brown; tarsi with dorsal surface dark orange-brown, and ventral surface pale yellow.

Color, female. Similar to male.

Structure. Head: tylus apically globose; antennal segment III shorter than IV. Pronotum: callar region transversely convex, with or without a vague, difficult-to-see, median longitudinal depression. Scutellum: wider than long (male) and longer than wide (female). Hemelytra: brachypterous, with the membrane reaching the third abdominal segment.

Measurements.—Male, female (mm). Head length 1.32, 1.46; width across eyes 1.48, 1.60; interocular space 0.90, 0.96; interocellar space 0.46, 0.51; preocular distance 0.86, 0.94; length antennal segments: I, 0.88, 1.04; II, 1.44, 1.56; III, 1.00, 1.08; IV, 1.08, 1.16. Pronotum: total length 1.52, 1.84; width across frontal angles 1.56, 1.48; width across humeral angles 2.40, 2.56. Scutellar length 1.04, 1.32; width 1.08, 1.24. Total body length 8.40, 9.90.

Type Specimens.—Holotype, male (BPBM): JAVA, Bali I., Dadjan Danu, 29 March 1956, J. Winkler. Paratypes: one female (UNAM), data as for holotype; one male (ZIL), Dammerman, Idjen Kendeng, 1400 m, 15 June 1924 (no. 68-III).

Etymology.—Named for Martin James Steinbauer in recognition of his recent rediscovery of *Acantholybas kirkaldyi* Bergroth.

Key to the Known Species of *Acantholybas*

1 Brachypterous, with the wings widely separated from each other, leaving the abdomen exposed mesally; hemelytral membrane reduced, reaching the third abdominal segment (Fig. 1) (Java) . . . . . *A. steinbaueri,* new species

1′ Macropterous; hemelytral membrane well developed, reaching the apex of the abdomen (Fig. 10) 2

2 Antennal segment I longer than 1.00 mm; antennal segment II longer than 1.90 mm. (Lombok Island) . . . . . *A. longulus* Breddin

2′ Antennal segment I shorter than 0.90 mm; antennal segment II shorter than 1.60 mm. (Fig. 3, 4) 3

3 Antennal segment I robust; body robust and longer than 10.20 mm; scutellum wider than long or equilateral (Tasmania) . . . . . *A. kirkaldy* Bergroth

3′ Antennal segment I slender; body slender and shorter than 10.00 mm; scutellum longer than wide (Fig. 10) (Australia and New Zealand) . . . . . *A. brunneus* (Breddin)

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